

# **DART SERVICE INSTRUCTION**

**TO AMEND INSTALLATION INSTRUCTIONS D350-578 REV. H OR LATER  
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS**

**ICA-D350-578 REV. 3 OR OR LATER**

REF. TCCA STC: SH93-4

REF. FAA STC: SR00028NY/SR00029NY

REF. EASA STC: 10016984

REF. ARGENTINA STC: CTS-0508.13(A)

REF. RUSSIA TC: CT107-350



## **1.0 PURPOSE**

It has come to Dart's attention that the Bearpaw Installations could prevent the Blade (leaf) on skidtubes equipped with Training Wearplates from contacting the ground and performing its intended function. Therefore, the purpose of this DSI is to introduce Shim Kits to ensure the Blade contacts the ground during landing. Qty(1) Shim Kit contains the necessary hardware for shimming both the LH and RH skidtubes.

The **DSI 9812-011 Shim Kit** can be installed on Dart D350-636-XXX Skidtubes equipped with Training Wearplates to ensure compatibility with D350-578-015/-017/-115/-117 Bearpaw Installations.

**NOTE:** The DSI 9812-011 Shim Kit is not compatible with D350-636-XXX Skidtubes that have been modified with the Dart Float Extension per FAA STC SR00470LA, SR00645LA, or SR00831LA or with D350-636-XXX Skidtubes that have been modified with D350-636-111/-113 Glacier Wearplates.

The **DSI 9812-013 Shim Kit** can be installed on OEM Skidtubes equipped with Training Wearplates to ensure compatibility with D350-578-011/-013/-015/-017/-021/-111/-113/-115/-117/-121 Bearpaw Installations.

## **2.0 PROCEDURE**

### **2.1 DSI 9812-011 SHIM KIT**

To ensure the D2741 Blade on D350-636-XXX Skidtubes with Training Wearplates contacts the ground when D350-578-015/-017/-115/-117 Bearpaws are installed, install the DSI 9812-011 Shim Kit as follows.

**NOTE:** It is acceptable to install shorter or longer bolts if required. It is also acceptable to add washers if necessary.

**NOTE:** It is recommended that an Antiseize thread compound (lubricant) be applied to the AN8C23A bolts prior to installation. Lubricant must meet or exceed MIL-A-907.



2.1.1 Raise the aircraft to provide access to the bottom of the skidtube. Remove D2741 Blades from the aircraft per Section 32.5 of ICA-D350-636. Discard hardware.

2.1.2 Install a D5702-1 Shim in between the D3488-3/-4 or D3488-041/-042 Blade Fittings, LH/RH and D2741 Blades as shown in Figure 1 with the hardware provided. At the installer's discretion, install bolts wet using Proseal 890 B-2 (PRC) and seal all gaps on mating parts using Proseal 890 B-2 (PRC) or equivalent. Torque nuts up to 480-690 in-lbs (54.2-78.0 N-m).

2.1.3 Update the Aircraft Log Book to indicate installation of the DSI 9812-011 Shim Kit and adjust Weight and Balance Record for the aircraft with the Weight and Balance data provided in Section 4.0 of this document.

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

**APPROVED**

BY:   
D. SHEPHERD (DE # 02)

DATE: 20.10.26  
CERT. NO.: SH93-4  
ISSUE NO.: 10

**APPROVED**

C	ADDED DSI 9812-013 KIT AND NOTE FOR LUBRICATION AT BOLT AREA TO PREVENT GALLING.	SAD	20.10.26
B	UPDATE HARDWARE IN PARTS LIST AND FIGURE 1. UPDATE PROCEDURE INSTRUCTION 2.2.	PM	19.02.22
A	NEW ISSUE; REF CAR18-275	RF	18.10.31
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	SAD		
CHECKED	KPT	DRAWING NO.	REV. C
MFG. APPR.	SAD	<b>DSI 9812</b>	SHEET 1 OF 4
APPROVED	CP	TITLE	SCALE
DE APPR.	DS	<b>BLADE SHIM ADDITION</b>	NTS
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## 2.2 DSI 9812-013 SHIM KIT

To ensure the Blade (leaf) on OEM Skidtubes with Training Wearplates contacts the ground when the D350-578-011/-013/-015/-017/-021/-111/-113/-115/-117/-121 Bearpaws are installed, install the DSI 9812-013 Shim Kit as follows:

2.2.1 Raise the aircraft to provide access to the bottom of the skidtube. Remove OEM Blades per the Aircraft Maintenance Manual. Retain OEM Nuts and Washers.

2.2.2 Install a D5702-1 Shim between the Blade Fittings and Blades using the Hardware shown in Figure 2. At the installer's discretion, install bolts wet using Proseal 890-B-2 (PRC) and seal all gaps on mating parts using Proseal 890-B-2 (PRC) or equivalent. Torque nuts up to 480-690 in-lbs (54.2-78.0 N-m)

**NOTE:** If the bearpaw has been positioned further aft due to a Aerazur Float System installation, The D2432F/D2432-3/D2672F/D4297-1/D4207-3 Bearpaw may be relieved to clear the Blade and the bolts when installing the DSI 9812-013 Shim Kit. The relief must leave 0.375" (9.53mm) thickness on the Bearpaw.

2.2.3 Update the Aircraft Logbook to indicate installation of the DSI 9812-013 Shim Kit and adjust Weight and Balance record for the aircraft with Weight and Balance data provided in section 4.0 of this document.

## 3.0 PARTS LIST



QTY -011	QTY -013	PART NUMBER	DESCRIPTION
X		DSI 9812-011	SHIM KIT
	X	DSI 9812-013	SHIM KIT
2	2	D5702-1	SHIM
	4	D5910-1	BOLT, COUNTERSUNK
4		AN8C23A	BOLT
4		MS21083C8	NUT
4		NAS1149D0863J	WASHER

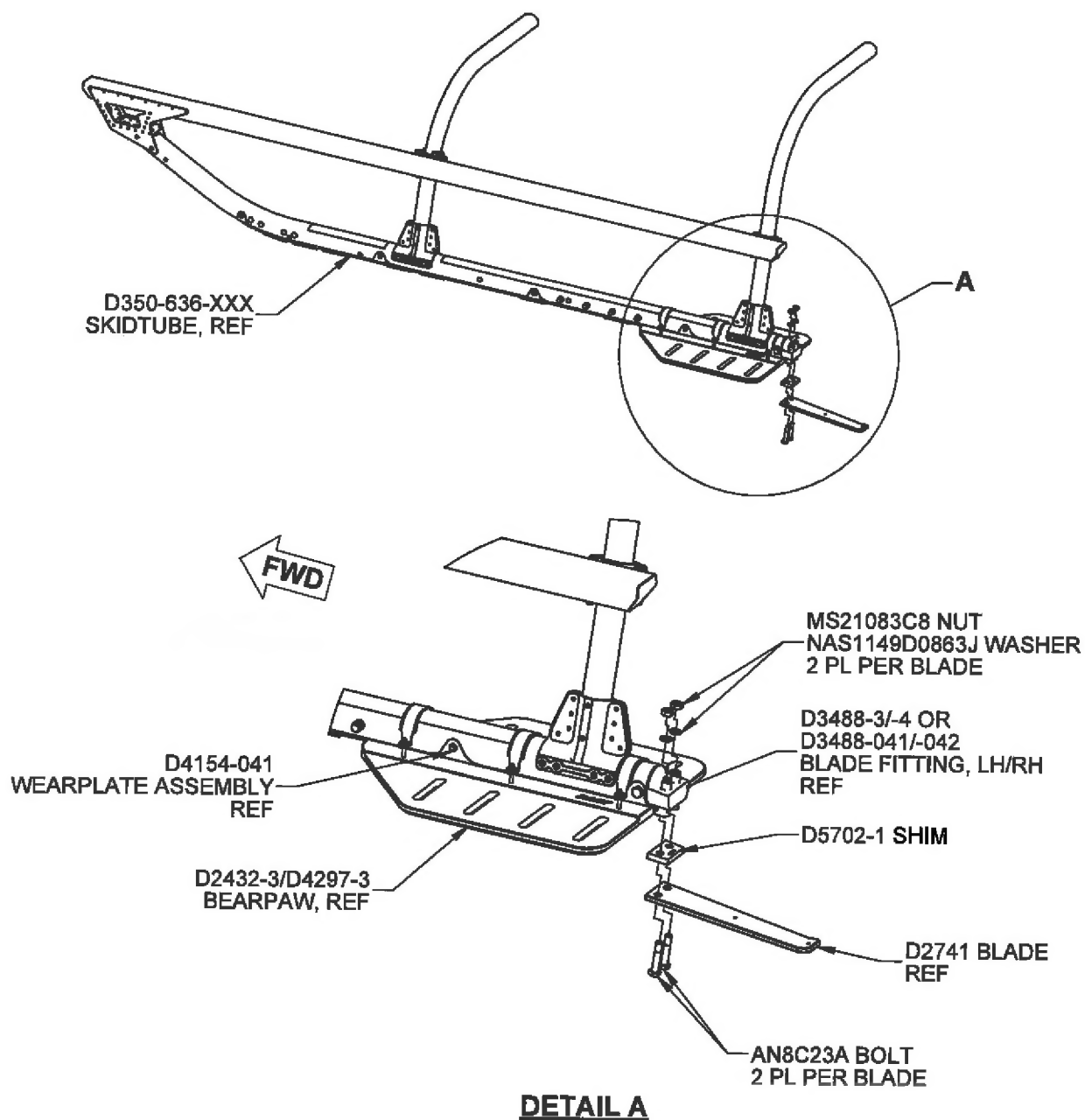
## 4.0 WEIGHT AND BALANCE:

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
DSI 9812-011 SHIM KIT	0.46 lb 0.21 kg	+/- 0.0 in +/- 0.0 m	+/- 0 in-lb +/- 0.0 m-kG	169.9 in 4.32 m	78 in-lb 0.9 m-kG
DSI 9812-013 SHIM KIT	0.57 lb 0.26 kg	+/- 0.0 in +/- 0.0 m	+/- 0 in-lb +/- 0.0 m-kG	169.9 in 4.32 m	97 in-lb 1.12 m-kG



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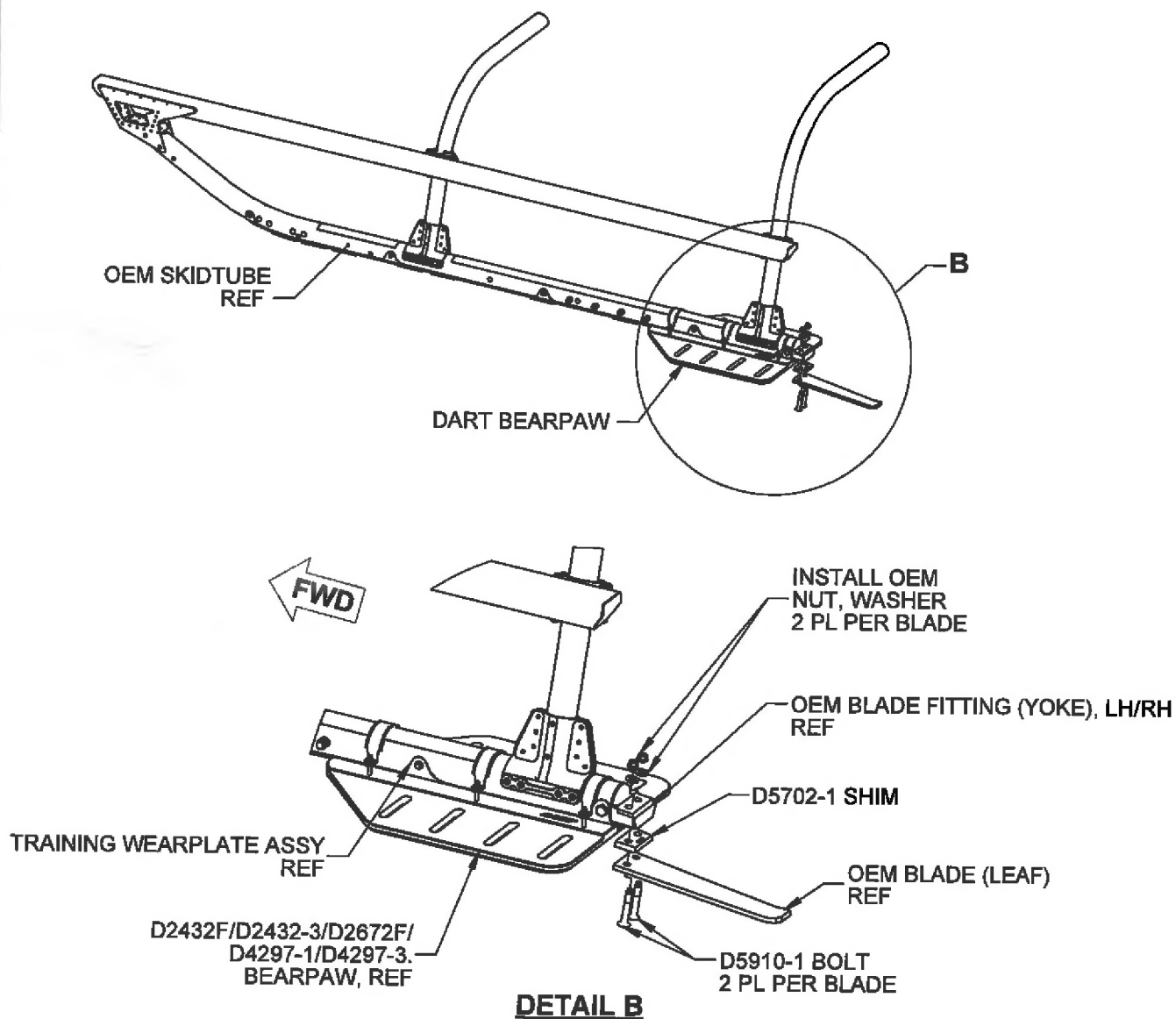
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**FIGURE 1 - DSI 9812-011 SHIM KIT INSTALLATION (TYPICAL)**  
DART SKIDTUBES

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**FIGURE 2 - DSI 9812-013 SHIM KIT INSTALLATION (TYPICAL)**  
OEM SKIDTUBES

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